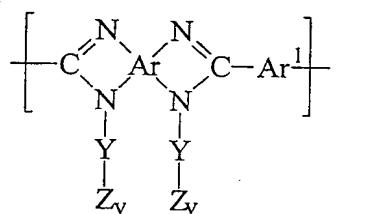


Abstract

Functionalized polyazoles, process for preparing them and their use

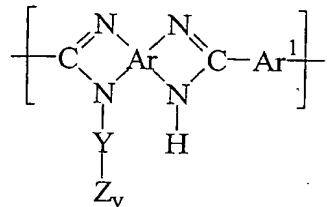
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The present invention relates to functionalized polyazoles comprising recurring imidazole units of the general formula



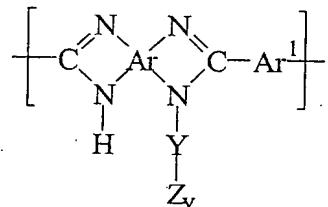
(1a)

and/or



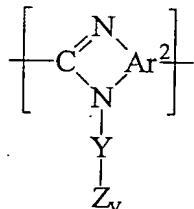
(1b)

and/or



(1c)

and/or



(2),

10

where the radicals Ar, Ar¹ and Ar² are tetravalent, divalent or trivalent aromatic or heteroaromatic groups,

Y is a bond or a group having from 1 to 20 carbon atoms,

v is an integer from 1 to 10 and

Z is a group of the general formula



or



where R^1 and R^2 are each, independently of one another, a hydrogen atom or a group having from 1 to 20 carbon atoms, characterized in that the polyazole is soluble in organic solvents. Furthermore, the present invention relates to intermediates and to a process for preparing the polyazoles. Furthermore, the present invention describes polymer electrolyte membranes and fuel cells in which the polyazoles of the invention are present.